



ForeView Network Manager

Release Notes

Software Version 5.0.x

MANU0364-01, Revision A
October 1, 1998

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Table of Contents

1.0.Purpose of Software Release	5
2.0.For More Information	5
The README File	5
The ForeView Manual	5
The FORE Website	5
3.0.System Requirements.....	6
UNIX Requirements.....	6
Windows NT Requirements.....	6
4.0.Obtaining the Software Distribution via TACtics Online	7
5.0.Pre-Installation Checklists.....	8
UNIX Checklist	8
Windows NT Checklist.....	10
6.0.UNIX Installation and Configuration Overview	12
Shared Memory Configuration.....	12
Installing ForeView	12
Configuring ForeView	13
Controlling the ForeView Daemons.....	14
Uninstalling ForeView	14
7.0.Windows NT Installation and Configuration Overview	15
Creating a Database Account.....	15
Installing ForeView 5.0	16
Configuring ForeView	16
Running ForeView	17
Un-installing ForeView.....	17

8.0.Known Issues	18
UNIX Installation Issues	18
Windows NT Installation Issues.....	19
Trap Reception Issue with OpenView on Windows NT	22
Launching ForeView HTML Help on Windows NT	22
Un-managing Switches with Attached UNI Devices	23
9.0.Contacting FORE Technical Support	24

1.0 Purpose of Software Release

These release notes describe new features, known issues, and usage tips for the *ForeView* 5.0 release.

ForeView 5.0 features a completely new software architecture, tightly integrated with HP OpenView and using new Discovery and Monitoring daemons that provide significantly improved discovery and status update performance. The ATM network is discovered and modeled in the new *ForeView* database, a relational database with an ODBC interface.

2.0 For More Information

In addition to these release notes, a readme file and manual provide information on how to install and use *ForeView* 5.0.

2.1 The README File

The *ForeView* 5.0 software distribution includes a readme text file with a summary of installation information and known issues. Please review this file before attempting to install *ForeView*.

2.2 The *ForeView* Manual

For complete information on *ForeView* 5.0, refer to the printed manual included with this release.

2.3 The FORE Website

For the latest technical documentation and release notes for the FORE adapters and other FORE products, visit the FORE technical manual website at:

<http://www.fore.com/products/manuals.htm>

The website provides manuals in Portable Document Format (PDF). They can be viewed or printed using Adobe Acrobat Version 3.0 Readers.

3.0 System Requirements

3.1 UNIX Requirements

- Sun Solaris 2.5.1/2.6
- Sparc Ultra 1
- 64 MB RAM
- 200 MB minimum swap space
- 150 MB free disk space
- HP OpenView 5.01 for Sparc Solaris
- Access to root account
- *ForeView* License Key Number
- The Informix software package must **not** be installed on the target machine.

3.2 Windows NT Requirements

- Microsoft Windows NT 4.0 SP3
- Pentium 233 mhz or greater
- 128 MB RAM
- 200 MB minimum Paging File size
- 120 MB free NTFS partition disk space
- HP OpenView 5.02 for Windows NT
- Local Domain administrator account
- *ForeView* License Key Number
- The following software packages must **not** be installed on the target machine:
 - Informix
 - Trifox Vortex
 - Redpoint SnmpQL.

4.0 Obtaining the Software Distribution via TACtics Online

The latest software is available via FORE's TACTics Online web link at the following URL:

<http://www.fore.com/tac/>

The latest technical documentation for this software (and other FORE products) is available via the FORE Technical Manual web link:

<http://www.fore.com/products/manuals.htm>

4.1 *ForeView* Licensing

ForeView 5.0 requires the user to enter a permanent license key. This key should be received with the software distribution CD-ROM from FORE Systems. If your software was downloaded from TACTics Online, a valid permanent license key will be e-mailed to you.



The *ForeView* 4.3 license CANNOT be used to install *ForeView* 5.0.

5.0 Pre-Installation Checklists

Please review the items in these checklists prior to installing *ForeView*.

5.1 UNIX Checklist

- Verify that at least 64 MB of RAM is installed. Issue the `dmesg` command and check the line that begins `mem =` to verify that it has a value greater than or equal to 65536K.
- Verify that at least 200 MB of swap space is available. Issue the `swap -s` command to verify that the sum of the used swap space and the available swap space is greater than or equal to 200000 K.
- Verify that Solaris 2.5.1/2.6 is installed. Issue the `uname -a` command and check that the SunOS version is 5.5.1 or 5.6.
- Verify that the *ForeView* target install location has at least 150 MB of free disk space. Change directory to the area and issue the `df -k` command to check that the amount available is greater than 150000.
- An `informix` user and `informix` group are required for installation of the Informix Online Workgroup Server. The *ForeView* 5.0 installer can create these for you. You must create accounts **only** if the accounts at your site are centrally administered and distributed via NIS. In that case, have your account administrator create user `informix` with primary group `informix` and distribute it to your system.
- HP OpenView 5.01 consolidated patch PSOV_01688 or later consolidated patch (PSOV_01984 is the most recent consolidated patch as of this writing) must be already installed. This patch is included on the *ForeView* 5.0 CD.
- If your system runs Solaris 2.5.1, you must install the recommended 2.5.1 Solaris patch cluster, which is available from <http://sunsolve.sun.com>. Follow the public patches link. This is not a requirement for Solaris 2.6.

- SNMP configuration (community strings, timeouts, etc.) for *ForeView* 5.0 is done via the OpenView *xnmsnmpconf* tool. ForeView discovery and monitoring depends on correct device SNMP configuration information. Therefore, before running these tools you should run *xnmsnmpconf* and ensure that your SNMP parameters are properly configured. (But see the entry on this topic below in the “Known Problems” section.)
- *ForeView* 5.0 uses different OpenView symbol and object definitions than those used by *ForeView* 4.3. If you are currently running *ForeView* 4.3 integrated with OpenView 5.01, you will want to do the following prior to installation of *ForeView* 5.0. These steps will remove existing *ForeView* 4.3 symbols from your OpenView database without disturbing your IP Map symbols. Failure to perform these steps prior to installation of *ForeView* 5.0 means that you can only remove the old symbols from your maps by hiding them (or starting over with a completely fresh OpenView database.)

```
-  ovstop fvovmon
-  ovstop fvovtrapd
-  ovstop fvdS
-  ovw&
```

Now, for each OpenView MAP (not submap) in which you have ATM symbols, you must make that map the active map (via Map->Open) and, while the map is active, run

```
FOREVIEW_HOME/bin/fvovunmanage -s
```

(You may have to do this twice before the ATM symbols disappear.)

In ovw, delete the top-level “ATM Networks” symbol.

Once all maps have been cleaned in this manner, run

```
FOREVIEW_HOME/bin/fvovunmanage -f
```

Exit ovw and you are now ready to proceed with *ForeView* 5.0 installation.

5.2 Windows NT Checklist

- Verify that at least 128 MB of RAM is installed. Right click on the Task Bar and select Task Manager. Click on the Performance Tab. The amount of RAM installed is listed under the Physical Memory section.
- Verify that at least 200 MB of Paging File is available. From the Control Panel | System Properties | Performance tab, the Virtual Memory section should indicate at least :

Total paging file size for all disk volumes : 200 MB

To increase the paging file size, click the **Change** button. Change the Initial Size and Maximum Size so that the “Currently Allocated” size under the “Total Paging File Size for All Drives” section indicate at least 200 MB.

- Verify that the Windows NT 4.0 SP3 (Build 1381) is installed. From the Control Panel | System Properties | General tab dialog, the Windows NT version string should read :

Microsoft Windows NT

4.00.1381

You can download the Windows NT 4.0 SP3 from the Microsoft Web site:

<http://www.microsoft.com>.

- Make sure that the *ForeView* target install location has at least 120 MB of free disk space, and is on a NTFS partition. To convert a partition to NTFS, invoke the Windows NT convert command. From a MS-DOS console window:

CONVERT drive: /FS:NTFS [/V]

For additional help, type **CONVERT /?**.

- Make sure that HP OpenView 5.02 is installed properly. Follow the HP OpenView readme file ***exactly***.

Make sure the SNMP instructions are followed, and Windows NT Service Pack is re-applied after completing HP OpenView installation.

From the Control Panel Services dialog, verify that the following services are listed:

- SNMP
- SNMP EMANATE Adapter for NT
- SNMP EMANATE Master Agent.

CAUTION



Failure to comply with the HP OpenView install readme instructions will result in *ForeView* installation problems.

- SNMP configuration (community strings, timeouts, etc.) for *ForeView* 5.0 is done via the OpenView *xnmsnmpconf* tool. *ForeView* discovery and monitoring depends on correct device SNMP configuration for data collection. Before running these tools, run *xnmsnmpconf* and ensure that your SNMP parameters are properly configured. (See additional entry on this topic below in the “Known Problems” section.)

6.0 UNIX Installation and Configuration Overview

6.1 Shared Memory Configuration

Before installing *ForeView*, you must add the required shared memory configuration

1. Login as root.
2. Edit the `/etc/system` file and add in the configuration parameters listed below. If you have previously set some of these parameters, then add the amount specified here to the existing value(s).
 - `set shmsys:shminfo_shmmax=268435456`
 - `set semsys:seminfo_semmap=256`
 - `set semsys:seminfo_semmni=4096`
 - `set semsys:seminfo_semmns=4096`
 - `set semsys:seminfo_semmnu=4096`
 - `set semsys:seminfo_semume=64`
 - `set shmsys:shminfo_shmmni=100`
 - `set shmsys:shminfo_shmmni=500`
 - `set shmsys:shminfo_shmseg=100`
3. Reboot the machine.

6.2 Installing *ForeView*

To install *ForeView*:

1. Login as root.
2. From the *ForeView* software CD, navigate to the Unix subdirectory. You should see the `core`, `db`, and `srv` subdirectory underneath. Run the `install_foreview` script.
3. You will need the *ForeView* license key to install *ForeView*. The key should be printed on your *ForeView* software CD; otherwise, contact your FORE System representative.

6.3 Configuring *ForeView*

To configure *ForeView*:

- Discovery seed switch(es) - During the installation process, you will be asked to provide the initial discovery seed switch. You can add additional seed switch post-installation by running the `fvseed` utility. Navigate to the *ForeView* installation directory, change the current directory to `\bin`, run the `fvseed` command passing the IP of the additional seed switch.

```
fvseed <ip>...
```

- Integrating with *ForeView* 4.3
ForeView 5.0 no longer support client side front panels. Instead, it now relies on web-based interface resident on the switches. If you haven't upgraded your switch software, *ForeView* 5.0 provides a utility to allow you to use your *ForeView* 4.3 front panels directly from HP OpenView menu. From the *ForeView* installation directory, change the current directory to `\install`, and run the `fv43ovlink` script.

Note that *ForeView* 4.3 must already be installed on your workstation for you to use the front panels.

6.4 Controlling the *ForeView* Daemons

The *ForeView* 5.0 discovery and status monitoring are implemented as the following UNIX daemons:

- *ForeView* Discovery
- *ForeView* Status Monitor

These daemons are installed to start up whenever Solaris is rebooted. To start and stop these daemons manually:

1. Change the current directory to the *ForeView* installation directory
2. Change to the bin directory.
3. Run the **fvstart** and **fvstop** commands to control the daemons. Use the **fvstatus** command to determine their run state.

These *ForeView* daemons are integrated with OpenView:

- *fvovmon*
- *fvtrapd*

Use the **ovstart** and **ovstop** commands to start or stop these daemons. Use the **ovstatus** command to determine their current running state.

6.5 Uninstalling *ForeView*

Make sure that the OpenView NNM is not running, and then navigate to the *ForeView* installation directory, change the current directory to the **install** directory and run the **remove_foreview** command.

7.0 Windows NT Installation and Configuration Overview

7.1 Creating a Database Account

Before installing *ForeView*, you must create a database account for the Informix database that *ForeView* uses:

1. Login as the local domain administrator.
2. From Start | Programs | Administrative Tools (Common) menu, start the User Manager. Create the following local domain accounts :
 - **group** : Informix-Admin
 - **user** : informix
3. Select User | New Local Group. From the group dialog :
 - a. Enter Informix-Admin for the group name
 - b. Add the local Administrator to the member list.
 - c. Press OK.
4. Select User | New User. From the new user dialog :
 - a. Enter `informix` for the Username and password.
 - b. Uncheck the following:
 - User Must Change Password at Next Logon
 - User Cannot Change Password
 - Account Disabled
 - c. Check "Password Never Expires"
 - d. Click on the **Groups** button, add the Informix-Admin to the Member of List and press OK.
 - e. Press OK.
5. Reboot the machine to make sure that the newly created account profile is activated. Failure to do so can cause the *ForeView* database component installation to hang.

7.2 Installing *ForeView* 5.0

To install *ForeView*:

1. Login as the local domain administrator.
2. Shut down all applications.
3. In the *ForeView* software CD, navigate to the Windows NT subdirectory. You should see the core, db, and srv subdirectory underneath. Run the **SETUP.EXE**.
4. You will need the *ForeView* License Key number to install *ForeView*. The key should be printed on your *ForeView* software CD, otherwise, contract your FORE System representative.

7.3 Configuring *ForeView*

7.3.1 Discovery Seed Switch(es)

During the installation process, you will be asked to provide the initial discovery seed switch. You can add additional seed switch post-installation by running the fvseed utility. Navigate to the *ForeView* installation directory, change the current directory to \bin, run **fvseed.exe** passing the IP address of the additional seed switch.

```
fvseed.exe <ip>...
```

7.3.2 Integrating with *ForeView* 4.3

ForeView 5.0 no longer supports client side front panels. Instead, it now relies on web-based interface resident on the switches. If you haven't upgraded your switch software, *ForeView* 5.0 provides a utility to allow you to use your *ForeView* 4.3 front panels directly from HP OpenView menu:

1. From the *ForeView* installation directory, change the current directory to \bin\config.
2. Run the **setenv.cmd** command to set up your path.
3. Run **fv43ovlink.exe**.

Note that *ForeView* 4.3 must already be installed on your workstation for you to use the front panels.

7.4 Running *ForeView*

The *ForeView* 5.0 discovery and status monitoring are implemented as Windows NT services. From the Control Panel | Services tab, the following entries are available :

- *ForeView* Discovery
- *ForeView* Status Monitor

These services are installed to start up whenever Windows NT is rebooted. To start/stop manually, press the **start/stop** button on the same tab.

These *ForeView* HP OpenView daemons are integrated with OpenView:

- *fvovmon*
- *fvtrapd*

Use the **ovstart/ovstop** command to start or stop these daemons. Then use the **ovstatus** command to determine their current running state.

7.5 Un-installing *ForeView*

To remove *ForeView* from your workstation, make sure that the OpenView NNM (**ovw.exe**) is not running, and then from the Control Panel | Add/Remove dialog, select *ForeView* and click on the **Remove** button.

8.0 Known Issues

8.1 UNIX Installation Issues

- The *ForeView* installation may error out when installing the components with the error: The configured host-name cannot be found in the (/etc/hosts,DNS,NIS). See installation readme for detailed instructions. If this occurs it can be caused by one of the following problems:

- The IP address cannot be determined from the /etc/hosts file.

Solution: Check the host file and verify that the host-name being used is reflected in the /etc/hosts file.

- The hostname of the machine is not being found in the host name space specified in the /etc/nsswitch.conf file. Either DNS or NIS is being use for hostname resolution but the hostname used for the NNM on which *ForeView* is to be installed cannot be found in the name resolution service.

Solution: Add the hostname to the name resolution service or edit the /etc/nsswitch.conf file to use only files for the host: line.

- The *ForeView* installation may error out when installing the database with an error message that states “Client host or user (root@hostname) is not trusted by the server”. This message may be seen in the /usr/fore/foreview/db/etc/online.log file. If this occurs it can be caused by one of the following problems:

- DNS is being use for hostname resolution. In this case the database install does not trust any clients that connect to the database.Solution: Add the following line to the /.rhosts and /etc/hosts.equiv files.

<fully qualified hostname> +

The fully qualified hostname should be the same as that seen when an nslookup is done using the assigned host IP address. By default this line is added to both files during the installation process using the name returned from the hostname command as the basis for determining the DNS fully qualified hostname.

- The hostname as seen by database clients is different from that used by the database server. This can happen if there are two or more ethernet interfaces and the configured hostname or ip address is not the primary ip interface for the workstation.

Solution: Add any extra hostnames into the `/.rhosts` and `/etc/hosts.equiv` files as instructed above. Insert one entry per line.

- OpenView's *xnmsnmpconf* application allows you to enter SNMP configuration information targeted at a range of IP addresses (e.g. 123.10.57.20-99, which applies only to IP addresses 20 through 99 inclusive in subnet 123.10.57). Although *fvovsnmpconf* correctly copies these entries into the *ForeView* database, they are not being parsed correctly in this release.

The only workaround is to avoid targets that include these ranges. You can do this either by using a wildcard (e.g 123.10.57.*) and using the same SNMP configuration in all hosts in a given subnet, or by creating individual OpenView SNMP conf database entries for each device in the range (use *xnmsnmpconf -create* to do this via scripting without having to use the GUI.)

8.2 Windows NT Installation Issues

- The *ForeView* database install phase can go into an endless loop. Check to make sure the SNMP services are installed and running (HP OpenView must be installed exactly as directed in the HP documentation). Also, check to make sure that the `temp` directory exists.
- The *ForeView* database install phase may fail indicating failure to create database file. This is usually caused by running out of memory. Shut down all applications to free up memory, uninstall *ForeView* using the `fore-view\uninstall\fvuninst.exe` command, then reinstall again.
- After installation completes *fvovmon*, *fvtrapd*, *fvmon* and *fvdisco* may all have errors accessing the database with a message that states that the `vtx5.exe` could not be executed. If the `vtx5.exe` and/or `vtx5.dll` are missing from the `${FOREVIEW_TOP}/Srv/Vtx/BIN` directory, the system will not function. Perform an uninstall and try reinstalling.

- After installing Microsoft Internet Explorer 4.0, *ForeView* stops working. Make sure that the Windows NT Service Pack is reapplied. Make sure that the Service Pack install does not replace newer DLLs.
- Uninstall stops all the SNMP services. If the user choose to abort the reboot step, these will need to be restarted manually from the Control Panel | Service tab. The services to start up are:
 - SNMP
 - SNMP EMANATE Adapter for NT
 - SNMP EMANATE Master Agent
 - SNMP Trap Service

NOTE - The SNMP Trap Service is not compatible with the HP OpenView Network Node Manager product.

8.2.1 Manual Uninstall

Uninstall may fail for various reasons. To complete the uninstall process manually, login as Administrator and do the following steps:

1. Run `ovstop fvovmon fvtrapd` from a command prompt.
2. Shutdown OVW.
3. Shutdown the following services from the Control Panel:
 - *ForeView* Discovery
 - *ForeView* Status Monitor
 - *ForeView* Vortex Service
 - INFORMIX-OnLine MessageService
 - INFORMIX-OnLine ServerAgent
 - INFORMIX-OnLine Workgroup Server
 - SNMP
4. Remove the *ForeView* integration with HP OpenView:
 - a. Open up a `command.exe` shell.
 - b. Run `<FOREVIEW_TOP>/bin/config/setenv.cmd`
 - c. Run `<FOREVIEW_TOP>/bin/config/fvovremove.exe`

Alternately, do the following steps:

 - d. Go to the `OV_MAIN/lrf` directory.
 - e. Run `ovdelobj fvovmon.lrf`.
 - f. Run `ovdelobj fvtrapd.lrf`.

g. Delete the following:

OV_MAIN/lrf/fvovmon.lrf **file**

OV_MAIN/lrf/fvtrapd.lrf **file**

OV_MAIN/registration/C/foreview **directory**

OV_MAIN/fields/C/fore_fields **file**

OV_MAIN/bitmaps/C/foreview **directory**

OV_MAIN/symbols/C/foreview **directory**

5. Delete the following Windows NT registry keys (and their subkeys):

- HKEY_LOCAL_MACHINE\software\Informix
- HKEY_LOCAL_MACHINE\software\FORE Systems, Inc\ForeView
- HKEY_LOCAL_MACHINE\software\ODBC\ODBC.INI\SnmpQL
- HKEY_LOCAL_MACHINE\software\ODBC\ODBCINST.INI\RedPoint SNMPQL Driver
- HKEY_LOCAL_MACHINE\software\RedPoint
- HKEY_LOCAL_MACHINE\software\Trifox
- HKEY_LOCAL_MACHINE\software\Microsoft\Windows\CurrentVersion\Uninstall\ForeView

6. Delete the following Windows NT registry values:

SnmpQL under HKEY_LOCAL_MACHINE\software\ODBC\ODBC.INI\ODBC Data Source

7. Delete the *ForeView* installation directory.

If an error message indicating the cdrsnmp.dll cannot be deleted because it is in use, shutdown the SNMP services, then attempt directory deletion again.

8. Delete the <drive:>\IFMXDATA directory

8.3 Trap Reception Issue with OpenView on Windows NT

Due to a problem in OpenView, the following issue occurs on OpenView running on Windows NT.

Traps sent by switches with IP addresses that the Windows NT station cannot resolve are simply dropped rather than being passed to OpenView. Traps with IP addresses that the Windows NT station can resolve are correctly passed on to OpenView and *ForeView*.

Additionally, if you send a trap from a UNIX station, and specify in the trap that the source of the trap is some address, the source of the trap will be shown as coming from the UNIX station.

8.3.1 Suggested Workaround

At a UNIX station with OpenView installed run `xnmtrap` and configure the traps to which you want *fvtrapd* to respond to be forwarded from the UNIX workstation to the Windows NT workstation. You have to configure each and every trap you want to be forwarded. In this scenario, however, remember that you have to have the UNIX workstation's IP address in the trap destination list on the switch from which you want to receive traps.

8.4 Launching *ForeView* HTML Help on Windows NT

If you are using a version of Microsoft Internet Explorer earlier than 4.0, the *ForeView* HTML help pages cannot be launched from the OpenView Help Menu. An error message similar to the following appears, even though the file is there:

Unable to Find the File D:/ForeView/help/fv_01.htm

There are two possible resolutions to this problem:

- Install or upgrade to Microsoft Internet Explorer version 4.0 or later on the Windows NT workstation. (The help files will then successfully launch with either Internet Explorer or Netscape.)
- Navigate to the *ForeView* help directory (`$FOREVIEW_TOP/help`) in Windows NT Explorer and double-click on the files there to display the help.

8.5 Un-managing Switches with Attached UNI Devices

If you select a switch on the ATM map that has one or more UNI devices connected to it and execute the ForeView | Unmanage object command on the switch, then after a few minutes the selection names of the UNI devices change you can no longer launch menu bar items against those UNI devices(i.e., the selection name is not a valid IP address anymore).

To resolve this problem, change the selection name of the UNI device by modifying the icon for the device in the OpenView submap. Hold down the right mouse button over the icon and choose Describe/Modify Object... In the dialog box that appears, change the selection name to a legal IP address (with single leading space).

9.0 Contacting FORE Technical Support

In the U.S.A., customers can reach FORE Systems' Technical Assistance Center (TAC) using any one of the following methods:

1. Select the "Support" link from FORE's World Wide Web page:

<http://www.fore.com/>

2. Send questions, via e-mail, to:

support@fore.com

3. Telephone questions to "support" at:

800-671-FORE (3673) or 724-742-6999

4. FAX questions to "support" at:

724-742-7900

Technical support for customers outside the United States should be handled through the local distributor or via telephone at the following number:

+1 724-742-6999

No matter which method is used to reach the TAC, customers should be ready to provide the following:

- A support contract ID number
- The key of each product in question
- All relevant information describing the problem or question